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LOCHVIEW.

A TALE IN THREE PARTS.—PART I.

HAVE you ever been in debt? If you have, you will fully understand the nature of the bugbear that scared me, the wet-blanket that hung like a cloud over my early life. From my very cradle, debts and liabilities, mortgages and bewilderments, loomed round our house, and it was not very long before I began to understand what made my father so anxious at times, my mother so pensive and—if I may use the word—fretful.

And yet Lochview was as fair a place as one would wish to see. The house was large and handsome, the rooms were lofty and spacious. There were stately avenues and extensive grounds, vast stables and coach-houses; all telling that the Allens were among the great people of the county. A keen observer would no doubt soon detect how straggling the trees of the shrubberies had grown; that repairs were needed here, there, and everywhere over the place; and that a general air of dilapidation clung with lichen-like tenacity to wall, and roof, and parapet.

I have been told the cloud began to gather in my grandfather Sir Murdoc Allen's time, and he must have been a desperately wild and reckless man, for he squandered his money, cut down trees, and I believe would have sold every stick on the place, had it been in his power to do so. How he spent his income, or what sort of a life he led, is not, however, any part of my story now. The record of his deeds is well preserved through all the country-side, and not an old woman there but will shake her head with a reproachful sigh, whenever Sir Murdoc's name is mentioned. After this worthy grandfather of mine came Sir Hans Allen, his eldest son, who died unmarried, and, I fancy, must have trod rather closely in his father's steps, for the people about Lochview playfully designate him 'Mad Hans' to this day. Then came my father, the youngest of all Sir Murdoc's sons. A whole race of brothers had at one time stood between him and the title, and he had

gone into the army, to win his spurs as best he might. But after a time, these brothers, one after another, died off, and then my father was recalled to take possession of Lochview, with all its honours and—*debts*. He did not come there alone, for some years previously he had married the pretty but portionless daughter of an earl; and I, his only son, was already born when he entered into the family dignities.

My father looked upon his heritage of debt as an unavoidable mischance—it hung like an incubus on his lot; but it never seemed to strike him that an effort might be made to get rid of the crushing encumbrance. He led an easy sort of life, accepting his position as one that admitted of no remedy; keeping up our hereditary dignity by still maintaining a retinue of servants, and hunters, and hounds; and keeping up our far-famed hospitality by gathering many friends round the bountifully spread table, or at the spirited 'meet.' He was passionately fond of my mother, and would fain have sheltered her from every rough blast of adversity, and everything that could vex or annoy. The old, romantic experience of how the handsome officer won the daughter of an earl, still lived in his heart as a recollection that could never grow old or pass away.

As time rolled on, and I became fully aware of all the heavy shadows that brooded over our fair inheritance, I vexed and worried myself beyond endurance; it became the one wish of my life to pay off all the debts, clear away the mortgages, and to see our beautiful Lochview in deed and truth our own. Oh, how I longed to enjoy its loveliness without those hideous encumbrances that were ever increasing, and growing broader and deeper! I panted to go out into the world, and make a fortune, heap up money in untold quantities, and then devote it to the family good. It was clearly not to be done in the quiet shades of Lochview; there, I might conjure up wonderful schemes, and plan out deeds of untiring energy in my imagination, but it must be away in some more active sphere that my skill and talents could be

turned to account. When I dreamed of all this in the solitudes of our leafy woods, or pondered it over when stretched at full length on the sward of our park, the idea seemed feasible enough; but I was hardly prepared for the surprise and amusement my projected plans created, when I ventured to unfold them to others.

The first time I made my views on the subject known was on the day I reached my majority, and my first confidante was my cousin, Jessie Duncan. I recollect the scene well, for the event was celebrated with all the honours. Friends and neighbours for miles round were assembled at the Hall, and there were tents erected, and a feast spread for the tenantry on the lawn. What a wretched mood I was in! The very congratulations, and feasting and hilarity, seemed but a mockery—a series of mockeries, in fact—and I rushed away down a laurel walk, to crush out some of the bitterness from my heart, and smooth down some of the wrinkles from my brow. Turning sharp round a corner, with hands carelessly thrust in my pockets, and my eyes bent on the ground, I came suddenly upon Jessie, and was brought to my senses by her ringing laugh.

'Found at last! Here have I been hunting for you all over the place this last half-hour.'

'Why do you want me?' asked I, not in the least returning her merriment.

'Oh, I don't want you, in the least, Sir Knight of the rueful countenance, but it's just possible other people may. The tenants are waiting to drink your health—and here I find you, the heir, howling all by yourself in the wilderness.'

'Do be rational, Jessie, and just tell me what I'm heir to! The family debts, the family dishonour! It drives me almost wild when I think of it all.'

'Hush, hush, Alec; don't begin that theme to-day. It isn't worse for you than it has been for others; don't make yourself miserable now.'

'But it is worse for me, because I haven't the placid temperament of the "others" to whom you allude; and I've made up my mind to find a remedy. I shall go away from Lochview, and never return till I've made money enough to free the place from debt and disgrace.'

Jessie made a funny little mouth, and then tried to look very grave. She knew as well as I did the scheme my mother had planned for us both, and she knew my opinion as well as I did hers on the subject. Jessie would one day be mistress of Ormsley, the broad acres of which estate touched the very boundaries of Lochview. If we were married, the encumbrance on our estate would vanish like dew in sunshine; but I had no wish to better our fortunes by marrying a rich wife; and I am sure Jessie in her heart honoured me for my independence of spirit. Our very knowledge of this pet project of my mother's had put us on our guard, perhaps; and though we had been companions and playfellows from childhood, we were still 'only friends,' not lovers. Tease and torment each other we certainly did, but I verily believe either of us would have made any sacrifice to help or please the other. Jessie tried to look grave when she heard of my intended flight from Lochview.

'Going away, Alec! Oh, whatever shall I do? I wanted you so much to go to Crabtree on some nutting picnics this autumn; I'd quite set my

heart on it, I assure you; and I really think it's most fortunate Harry Western has promised to come and stay with us all September.'

'Is Harry Western coming here again?' asked I, somewhat stiffly.

'O yes; and I'm glad of it, for he's better at pulling down the hazel bushes than you are. He's so much taller, you know.'

'That's all you girls think about; if you can only get a man six or seven feet high to help you to pick nuts, and fetch and carry for you, you don't care for anything else. Real-life sorrows and anxieties are nothing to you.'

'Ain't they, though? That's all you know about it, Sir Knight of the doleful visage. But now come back to the lawn, or the "brave peasantry, the country's pride," will be growing impatient. And, Alec, put on a brighter look, or people will think you've seen a ghost.'

I tried to obey my blue-eyed, merry cousin; but more than once that evening I moralised on the fickleness of the world in general, and of women in particular. No sooner should I have withdrawn myself from Lochview, than Harry Western would be at hand to take my place—to ramble about with Jessie, and do her bidding. She would hardly miss me, perhaps. But is not this ever the case! Seldom after a little while are we really missed from our scene of action; some one or other is always ready to step into our shoes, to take up the reins, and to handle them, better, no doubt, than we have done! Thus I moralised.

The next day I unfolded my plans to my father. I recollect we were riding round the brow of a hill, and a turn of the road gave us a full view of Lochview Hall and the broad lands round it. My father drew up his horse and paused, looking down for a minute or so on the fair scene; then he turned away with a half-sigh, and I exclaimed: 'It's a pretty place, father; and I will never rest till every inch of it is our own—no more mortgages for me.' He looked round at me inquiringly; perhaps he thought I was going to carry out my mother's idea, and marry Jessie.

'This life of idleness doesn't suit me, father; I want to get away into some sphere of action where work and energy will win success. I want to get into some business where money can be made. Will you help me?'

'A fine enough idea in theory, Alec, but you could never carry it out. If, however, you could make all things fit in according to your views, and plan just as you propose, the achievement would indeed be a noble one.'

'But I hope to make the attempt. You would wish Lochview to be out of debt, wouldn't you, father?'

He turned round with a quick flash in his eye. 'Would a man, lost in a dark jungle, wish for the open country and the bright sunlight? Ay, my boy, next to the health and happiness of your mother and yourself, that is my dearest earthly wish,' exclaimed he eagerly.

'Then I'll do my best to rid our name of the dishonour that rests on it. You won't thwart me; will you, father?'

'No, Alec; but remember I did not bring this dishonour on our heads.'

My father spoke as if deeply pained, and I was sorry I had used the word 'dishonour,' though I did consider it dishonour of a deep tint. After

this we rode home in silence, and for some days no further word was spoken on the subject. But I knew my father had mentioned it to my mother, and that they held long consultations about it. I could see it by her wan and wearied look, by the long earnest glances she cast at me, and by the deep sigh with which she turned away when I caught her eyes.

By-and-by the mystic, noiseless whisper of rumour, that rises no one knows how, and spreads no one can tell where, had made it patent that I was going away. Everybody in the house knew it, and all sorts of reports were current. The project began to be shaped into form, and this was the guise it had taken. My father wrote to Mr Alexander Forbes, a man who had once been an agent of my uncle, Sir Hans Allen, but who was now a flourishing stock-broker in Liverpool. He had made a fine fortune there, people said; and to his teaching I was to be consigned, that I might learn the secrets of business and follow his example. I was to board in his house for the present, 'till,' as my father said, 'I had gained all the knowledge I required, or had grown tired of my whim.'

Well I remember my last dinner at Lochview. The scene flashes before me at this moment. Our dining-room was a large, lofty apartment, the walls panelled with oak, nearly black with age. Round these panelled walls were portraits of my ancestors, who seemed on this occasion to glare down at me with reproachful eyes. Our coat-of-arms figured in many a nook and corner of the place. It stared at me from the high-backed chairs, it shone out on every ornament on the table. At one end of the apartment was a large decorated window, with graceful mouldings and geometrical tracery, and from thence our family shield sparkled down at us in rich stained-glass. I recollect the sun was just setting as we lingered there, talking; and the rays slanted in through the leaves of the acacia and cyprus trees that stood outside the window, and reflected the colours of the stained-glass on the white table-cloth in flecks and flashes of light, that trembled and flickered like a broken-up rainbow. The two tall, sleek footmen arranged the viands that we had no appetite to eat, and the still sleeker butler brought in the wines that we never tasted. All the more for the servants' hall, no doubt, by-and-by. As soon as the dessert was placed on the table, and the servants were gone, my mother gave a sigh.

'I can't bear to think of your leaving home, Alec. It seems as if we were casting you adrift on the world.'

'But I'm not going adrift, mother; I hope to steer my course well, and to return home with a good cargo before long.'

'Our son means to work, Effie, to work hard, so you must not discourage him.'

'It's the "work" I complain of. I never thought to see my only son departing from his proper position, and going out to work among the common people.'

'Don't let that stand in the way, Effie. If Alec can make his fortune by honourable industry, let him do it, by all means, and build up our falling house—it sorely wants propping.'

'Not one of my family ever went into business before; none of them had to earn their money in that way.'

'I daresay not, my love. Your ancestors, as well as my own, understood the art of *spending* far better than that of *earning*. Alec may possibly become a millionaire some day; and if he does not, let us honour him for trying to help, and wish him God speed.'

My mother was silent, but she shook her head sadly. A splendid pine-apple was on the table before her: it might have tempted any one with its perfume and lusciousness; but she only turned over the dainty sections, not caring even to taste them. I think I see before me now that 'ladye of high degree,' with her slight fragile figure, her aristocratic features, and light-gray, well-set eyes. Sir Dugald, my father, was some years older than his wife; even now there were traces that told what a handsome man he must have been in his youth. His fine upright figure and military bearing often put me to the blush, and made me wish for those extra inches that made him tower above my head; for I was not tall like my father, nor handsome like him either. My old Scotch nurse, Janet, who had been part and parcel of our establishment ever since I was born, and was proud of our lineage, sometimes openly lamented my looks.

'Indeed, Maister Alec, you've no great cause for vanity. You've neither your mother's bonnie face nor your father's stately figure.'

'How can I help that, Janet?' I would exclaim.

'You maybe canna' help it, sir; but mind ye, them that's neither braw nor winsome should be all the prouder in mind.'

'In one way I shall never be that either, so you must just put up with me as I am, Janet.'

The old woman had a word of advice for me on this last evening, for when I had turned the clumsy footman out of my dressing-room, with a reproof for crushing up my shirts, and folding my coats into creases, she came hobbling in, and with the air of a privileged retainer, began watching me.

'These lazy fellows know naught of packing; and as for folding and cording, I'll warrant you could do it better yourself, Maister Alec.'

'I daresay I shall, with your help, Janet.'

'Deed, I canna' do much in that way, sir, but though a silly body mysel', I can still gie ye a bit of advice.'

'Say on then,' said I, trying to shut the cover of my portmanteau.

'Sandy Forbes is a great man now, they say.'

'Indeed, nurse?'

'Ay. And I remember when he was lowly enough here, in your Uncle Hans' time. But he made money in Liverpool, and married his employer's widow.'

'Like the industrious apprentice in the story,' replied I, giving another plunge at my portmanteau.

'Not quite that—the apprentice married the daughter, but Sandy married the widow, and a rare, showy, managing woman she is. It's of her I would warn you, dear Maister Alec.'

'But what harm can she do to me?' I exclaimed, laughing.

'She has two daughters, laddie—her first husband's children—Alice and Carrie Merritt, they're called; and they tell me these young misses are very fine ladies indeed, with their silks, and feathers, and gewgaws. Beware of them.'

I laughed outright at the earnest old soul, and

said: 'You must be getting into your dotage, Janet; surely, you don't think I need a warning about fine young ladies at my age! I've attained my majority, and gone past all that!'

'Ay, don't ye be too boastful, Maister Alec. Ye know but little of the world yet, and *they* know ye'll be Sir Alexander some day; so don't be above taking the advice of an old woman like me.'

When my packing was over, I went out to my favourite retreat on the hill-side, and there, pacing to and fro among the heather, with my two dogs at my heels, I took my adieu of the place in my own dreamy way. I looked down on the clear calm waters of the loch from whence our house took its name. The tops of the opposite hills that shut in the loch almost like an inland sea, were still rose-tinted and lilac, from the last rays of sunset. Here and there were patches of mossy turf, and glimpses of shady undulations mysterious and deep. Down the sides of the hills were clusters of cottages, that nestled amidst sheltering woods. Lower down yet were bright yellow sands, on which fishermen were lounging about among their boats, and children were shouting and romping with each other. The hum of voices floated up to me mingled with the musical ripple of the waters. How calm, how beautiful it all seemed! Never had it appeared more so than now, when I was on the point of bidding it all farewell. Yet, who knows but this very calmness had been jarring on my spirit through all those by-gone years. The very repose may have been the secret talismanic influence that set all my nerves tingling and panting for a more active life. No pent-up, caged bird longed more than I did to be out abroad in the world, and to take its true place among fellow-workers. Be this as it may, I was now all eagerness to set forth on my mission, and as I looked down on the placid scenes of Lochview, a wish and prayer rose to my heart that I might be the one who should yet wrest that fair heritage from the grasp of debt and dishonour.

Ere long I found myself hurrying along as fast as express train could carry me, to that town that was to prove an El Dorado, and where all my golden dreams were to be realised. Bright visions rose in my mind as the train sped along. This money-getting theory of mine had taken such strong hold of me that I had determined to devote all my energies to working it out. Business seemed to me a noble science, and speculations were doubtless a series of triumphs. It was evening when I reached Liverpool, and as Mr—or as we more generally called him, Sandy Forbes had not come to meet me as I expected, I drove on to his house alone. When I looked out, and saw the afternoon stream of busy passers-by, and watched the stir of traffic, my spirits rose high; *now*, I had reached the scene of action, and brain and body were ready for the conflict. Sandy Forbes lived in an old-fashioned square, some distance from the heart of the town. When the cab stopped at the door, and I got out, I was conscious of a hope that I might escape at once to my room, to rest, and prepare myself for my coming duties on the morrow. But I soon found I had reckoned without my host, for Mr Forbes met me at the door, and after the first welcome, told me, with a bland smile, dinner was nearly ready. There was a general look of careful getting-up in Sandy's

appearance; his coat was of the glossiest black, his tie was of the most irreproachable white. I was rather provoked at having to turn out my valise and hastily dress myself for dinner, instead of being allowed to retire to my room, and enjoy my first evening in solitude. I was still more provoked when I found a whole drawing-room full of company assembled to greet me. At least the room seemed crowded at the first glance, but on a nearer inspection I found only about a dozen people were there. Mrs Forbes came forward at once with outstretched hand. I saw she was a very fine lady indeed, all glowing in satin, and lace, and gold ornaments—a much finer lady than ever my mother pretended to be, for *she* was always simply and quietly dressed, never decked out with many hues and tints, as Mrs Forbes was. Then I was introduced to the others; and ere long I found myself going down to dinner with Alice Merritt, the eldest daughter of the house, leaning on my arm. But little interest had the Forbes family to me then; I even smiled to myself as I remembered old Janet's warning about the young 'misses'; and then I took a full view of the one sitting beside me at the table. She was undoubtedly a showy girl, with plenty of colouring about her. Blue eyes, sunny hair, pink cheeks, and white teeth. And I saw her sister Carrie faintly resembled her, with a paler, washed-out kind of resemblance. Dick Merritt, the only son, was overdressed and foppish. I took a cordial dislike to him at the moment, which increased tenfold as time went on. The other people in the room were invited guests. Mr Cornish, the rich cotton broker, led Mrs Forbes down-stairs, and poor Sandy walked humbly with the broker's better-half.

I soon discovered that, as son and heir of Sir Dugald Allen, I was expected to prove a great attraction to the party—was, in fact, the chief star of the evening. What they had been saying about me, or what they looked for in me, I know not, but I could not hide from myself that I was honoured with great attention. Alice Merritt was most patronising, as girls will be to men who are four or five years their junior. She talked about Lochview as though she had been a native of the place.

'I was not aware my home was so familiar to you, Miss Merritt.'

'Oh, I don't know it personally,' she replied; 'but Papa Forbes'—and she nodded towards Sandy—'Papa Forbes spent his early youth there, and I have been asking him dozens of questions since I heard you were coming amongst us.'

'Very kind of you to take such a lively interest in me, I'm sure.'

'Lochview must be like a beautiful picture, with its hills and woods, and lights and shades. Is it not like a picture, Mr Allen?'

'Yes; and a very varying one. I wish you could have seen it as I did last evening, Miss Merritt. Then in the calm twilight it looked the very emblem of repose and calm happiness.'

'And yet you gave it up to come into this matter-of-fact, work-a-day sort of place! How I long to get away from it sometimes! A season at Lochview must be delightful, charming! Mamma always will take us to Boulogne in the season, and that is almost as crowded and over-done as Liverpool.'

'I suspect you would soon grow tired of our quiet north country. You would never see the new fashions there; we are quite half a century behind other people.'

'You like Lochview, don't you?'

'O yes; my whole life, so far, has been spent there, and there are thousands of associations that make the place very dear to me.'

Just then, I happened to look across the table, and saw a pair of deep, soft brown eyes watching me with fixed intentness; but they were averted the moment they met my gaze. A second glance shewed that the owner of these wondrous eyes was a pale girl, with a face like a sweet pathetic legend—a lily-like girl, with delicately cut features, and glossy bands of dark hair turned back in a full roll from her forehead. She wore a high black dress, unrelieved by the magic sparkle of ornaments, or by those delicate bits of colour of which girls of her age so aptly know the charm. Alice rattled away after this, but I did not give much heed to her affected liveliness; I was mainly intent on trying to meet those haunting eyes again. They attracted me with a mysterious power, they fascinated me, they tormented me marvellously; I could not account for it. It seemed like some inexplicable affinity of soul to soul. At last the ladies rose from the table; the flutter of ribbons and rustling of silks were heard as they passed out of the room and left us to our own resources. When we joined them in the drawing-room, my first thought was to get a nearer view of the little girl in black; but in vain I glanced into every corner of the room; the eyes were not there, nor the owner of them either. By-and-by, impatience got the better of me, and I began to question Alice Merritt.

'Who was that lady who sat opposite us at dinner? I don't see her here now.'

'Oh, you mean Mrs Wilkins! She is the wife of an awfully rich old ship-owner.'

'Indeed! A very young wife, I should think.'

'Not so very young either, but very well preserved. See; that is her husband talking with Papa Forbes—we always call him "Papa Forbes,"' added she, laughing.

I looked over, and saw a very stout old gentleman, with a bald shining head and short-cropped white beard. He held 'Papa Forbes' by the button-hole, while he propounded in his ears some intensely interesting subject, no doubt.

'Is that Mrs Wilkins' husband? Where is she now?'

'The carriage came for her just after dinner. Her married daughter gives a children's party to-night, and she is gone to help to entertain the little ones; poor Mrs Sotherby, her daughter, is so delicate.'

'I think we must be playing at cross-purposes. The young lady I mean never could be a grandmother. She wore a high black dress, and had deep, dark eyes.'

'Perhaps you mean Hester Carew. Mamma would have her in to dinner to-day, because we were thirteen—a mystic number. She lives with us, and has gone to bed now, I daresay, poor child! Do you like music, Mr Allen?'

'Yes; very much,' replied I, noting much the change in Miss Merritt's manner when she spoke of Hester. We walked side by side over to the piano, and there, with her gauzy blue dress spread

round like a gigantic hyacinth, sat Carrie, a group of gentlemen beside her, for other friends had dropped in to the evening-party.

'What shall I sing?' Carrie was asking. Two or three songs were named; and Carrie exclaimed quickly: 'As none of you agree, I'll sing my last new song, my special favourite just now.'

That song I am doomed to remember, for I have many a time since heard it sung by dearer lips than Carrie Merritt's.

AIDS OF SCIENCE IN THE DETECTION OF CRIME.

As cannot but be generally known, the photographic art has been largely employed to insure the detection of crime. Our principal police-offices have photographs of habitual evil-doers, who by this means can be easily tracked out and pounced upon when wanted. A man may change his name, and almost as easily change his dress, but he cannot well change the shape of his nose, his eyebrows, and other features. Wherever he settles down, he runs a chance of being found out. This we consider a great triumph. Photography becomes an important aid to the general system of police.

Going into a more minute consideration of the subject, we come to cases in which the nefarious use of poisons may be detected and brought to light. Here, chemical science plays an important part. The marvellous delicacy of tests, and the perfection to which the process of analysis has been carried in the case of the poisons more easily accessible to the public at large, have together left the poisoner no loophole of escape, so far as the detection of the noxious substance is concerned. Of course, the circumstantial or other evidence of poisoning may fail, and the criminal may thus escape; but the art of the chemist rarely, if ever, falls short of its due work in proving the presence of the substance in question. The entire range of poisons, however, has not yet been overtaken by chemical science. Year by year the poisoner has been driven to narrower and narrower limits in the choice of substances for his nefarious purpose; and so far as the mere detection of poisons is concerned, it may be said that the criminals of the future will have to seek in the class of poisons derived from the organic world, the aids to their crime. By organic poisons we mean those prepared from plant or animal substances; and confessedly, chemistry as well as medical science has yet much to learn, not only respecting the action of such substances, but regarding their detection and characters also. It is fortunate, however, that such subtle poisons as strychnia and its compounds, the forms of digitalis (obtained from foxglove) or atropia (obtained from the deadly nightshade), represent the very substances which are either difficult or absolutely impossible to be procured by ordinary or non-scientific persons. And to this latter fact, society in great measure owes its immunity from crimes committed by agencies the detection of which, in some cases, has baffled the most advanced chemical science of our day.

Entering the domain of the microscopist, we naturally find the objects therein presented of less technical character than those which concern the chemist. A crime, let us suppose, has been committed, and in the course of the evidence

appertaining thereto, certain suspicious marks or stains resembling blood are observed, say on the dress of the accused person. The establishment of the entire case for or against the accused, may perchance depend upon the answer which the microscope gives to the question regarding the nature of these stains; and it can well be estimated how important a matter, in the hands of the man of science, the work of this instrument becomes. For example—as in a case which actually occurred in the practice of the great German medical jurist, the late Professor Casper of Berlin—it became a matter of great importance to distinguish the blood of man from that of birds—a task to the performance of which the microscope is quite equal, as will be presently explained. Or upon a knife or other weapon, as has occasionally happened, some hairs have been found. It may go very far to prove, or disprove, a most serious crime, if the exact nature and characters of these hairs can be ascertained; for, in an actual case of murder tried in England, the question, whether or not certain hairs found upon a hammer were human hairs, had the most vital bearings upon the guilt or innocence of the prisoner. The identity of shreds of cotton, of fibres of silk, or of other materials, with fibres taken from the dress of the accused person, or from the victim of his crime, may similarly possess important relations to the great question at issue; and these relations can only be determined by the patience and skill of the microscopist.

Although the importance of microscopic work in the detection of crime may be fairly and generally admitted, it is yet a matter of fact that very gross misconceptions prevail in the popular mind regarding the extent or limitation of the microscopist's powers. By some, for example, these powers may be deemed of very limited kind; whilst by others their nature may be maintained to be illimitable. The truth is, that microscopic science, like every other branch of inquiry, is progressive in its character; and whilst great advances have been made upon the science of the past, it may fairly be expected that the future improvements of our microscopes will enable research to proceed to an extent wholly unattainable at present. And it must also be noted, that the knowledge of anatomy and physiology necessary to the understanding of the objects which the microscope reveals, together with the improvement of that knowledge, form considerations of equal importance with the perfection of the mere mechanical details of the instrument.

The distinctions between the hairs of man and those of lower animals, have been ascertained with tolerable exactitude. The want of such knowledge may sometimes lead to grave mistakes; a fact exemplified by one instance in which a person was arrested on suspicion of having murdered another; a hatchet having blood and hairs adherent to it being found in his possession. Microscopical examination of the hairs, however, shewed that they were not those of man, but of some animal; and this fact, together with subsequent testimony, obtained in consequence of the microscopic evidence, tended to acquit the accused. Certain woollen fibres, exhibiting a dark dye of peculiar kind, on another occasion were found mingled with blood which had dried upon a knife used to commit a murder. The identity of these fibres with those of a coat worn by the accused person, formed a strong

fact of circumstantial nature against him. We can thus readily distinguish and separate silk, linen, and cotton fibres respectively. Those of linen exhibit a rectilinear or straight and tapering appearance, whilst these fibres are also jointed at irregular or unequal intervals. Silk fibres are recognised by their simple cylindrical form, and by their want of characteristic markings; whilst the woollen fibre is of irregular symmetry and of unequal thickness, and exhibits on its surface markings of a twisted form. It is equally interesting to observe, that fibres taken from very ancient garments present the characteristic appearances of modern fabrics. The linen fibres from a mummy-cloth, and the woollen ones from the shroud of a person burned in the fourteenth century, were found on examination to present the same recognisable characters as their modern representative fabrics.

The characters of human hair are very distinct and characteristic; those of the eyelashes being of thicker structure and coarser texture than those of the head. The microscope may even shew us if a hair has been bruised or otherwise maltreated; since, in such cases, the delicate sheath of the hair will be seen to be torn or frayed. The hairs of such animals as the horse and cow can, even by aid of an ordinary magnifying-glass, be distinguished from human hairs; although notably in some dogs, such as the spaniels, the hair may sometimes approach very closely to the human type. The hairs of the rabbit and hare exhibit, when microscopically examined, a crossed appearance, produced by numerous little cells or divisions running across each hair; and it is notable that animals (such as the squirrel and rat) belonging to the same order of mammals as the rabbit, exhibit a similar pattern in their hairs.

The detection of blood-stains, and more especially the determination of the animal from which they have most probably been derived, forms a subject obviously of greater importance than that of the microscopic examination of hairs. The physician or microscopist, on being shewn a stain of reddish colour, has in the first instance to assure himself that it is really blood, and not simply iron-mould, or other substances which may more or less closely resemble the vital fluid. Certain chemical tests will most satisfactorily determine this first point; but under certain circumstances, the microscope is the only available and satisfactory means of answering both questions at once.

When a very thin film of human blood is pressed between two plates of glass, as in ordinary microscopic work, and examined under a tolerably high power of the instrument, the well-known red fluid is seen in reality to consist of a perfectly colourless liquid known as the *serum*, and of an immense number of minute solid particles floating in this liquid. These latter particles are the *blood-corpuscles*; the vast majority of these bodies appearing of a reddish-yellow hue, whilst a few are seen to be of white colour. The white blood-globules measure each about $\frac{1}{1000}$ th of an inch in diameter; that of the more numerous red globules averaging $\frac{1}{2000}$ th of an inch. The red colour of the blood is thus seen to be entirely due to the presence of these little globules, which exist in such numbers, that the fluid presents to the unassisted sight a uniformly red appearance. The blood of

all animals contains corpuscles or globules of one kind or another; and it is from the different characters presented by the blood-globules of different animals, that the microscopist is enabled to distinguish the vital fluid of one form from that of another.

Confining our remarks to the case of the higher or vertebrated animals, which begin with the fishes as their lowest representatives, and pass through reptiles and birds, and quadrupeds or mammals, up to man himself, we find that the microscopist is at once enabled, through peculiarities of structure, to distinguish the blood of *mammals*—including man, of course—from that of the fishes, reptiles, and birds. Thus, when we examine the blood-globules of the three latter groups, and lay aside variations in size, we find them to be invariably oval or elliptical in shape; whilst those of mammals are circular in form—save, curiously enough, in the camel tribe, in which the blood-globules are oval. Thus, no one may, even in respect of shape, mistake the blood of man or of any quadruped, except the camels and llamas, for that of any lower animal. But a more important distinction may readily be found between the blood of the lower vertebrata, and that of man and mammalia. Within each blood-globule of fish, reptile, or bird, a little central particle, known as the *nucleus*, is found. The red blood-globules of all mammalia, including the camels, never contain any such central particle; and it is from the invariable absence of this nucleus or 'central spot,' that the microscopist can decisively pronounce his verdict that such blood-globules must belong to man or some other mammal, and to no other group of animals. A patient, feigning spitting of blood, was thus detected in her imposture, by the physician seeing, on microscopic examination, that the blood contained oval nucleated globules, presenting the characters of those of birds. The patient's surprise on being informed that her stratagem was discovered, may be readily imagined. And, similarly, the defence in a case of murder was partly broken down by its being shewn that blood alleged by the prisoner to be that of a fish, was in reality that of a mammal.

But it may be urged, that whilst the microscopic test holds good in separating the blood of the mammals from that of birds and still lower forms, there still remain the possibility and probability of confusing the blood of one mammal with that of another. It may thus be asked if the microscope can shew us any essential distinctions between the blood of man and that of the animals to which he is most nearly related? Here, however, we begin to approach the limitation of the microscopist's powers; for—excepting, of course, the case of the camels and their allies—we have now to trust to the test of the *relative sizes* of the blood-globules of different mammals, to enable us to distinguish those of the human being from those of the quadruped. And confessedly, the test of size is one which, besides being in all cases of doubtful application, can hardly be applied or extended to very practical or decisive ends. The blood-globules may further vary in size in the same animal; and this latter fact, of itself, almost entirely vitiates the efficacy of the test. Then also, the size of the blood-globules of quadrupeds bears no relation whatever to the size of their respective bodies; and in this respect, the blood-

globules of a horse and a mouse are of nearly similar size; whilst those of man, the dog, and the rabbit, are all nearly identical in dimensions. Nor does the age of any given animal seem to affect the size of its blood-globules; for in the embryo or young form, they are as large as those of the adult.

Thus, practically, no microscopist would venture to state positively, when shewn two specimens of blood—taken from the dog and man respectively—which was the human, and which the canine blood. In the musk-deer, the blood-corpuscles are the smallest that are known in any living animal, being each, on an average, about $\frac{1}{1000}$ th of an inch in diameter; and in this and other exceptional cases, the test of size might prove to be of practical utility; but whether or not the science of the future may reveal to us other modes of discerning differences between the blood-globules of mammals, this latter test will always be regarded as subject to error and dispute.

In cases, therefore, in which blood may have been proved to be at least that of some mammal, the microscopist must avow his inability to proceed a step farther with certainty. Not unfrequently the straining of scientific evidence in our courts of law on this very point, has met with severe and just rebuke; and such instances are clearly to be taken as merely the expressions either of ignorance or credulity, since they can in no sense be held to represent the opinions of the earnest and practised microscopist, who knows too well the limitations of his powers.

With all these limitations, however, microscopical science can boast of many important advances in aiding the law-administrator in his protection of human life and interests; and it should form no unimportant test of the value of such knowledge, that, whilst serving as a means of culture, and of interesting us in the structure of the lower forms of life, it should also be capable of being extended to the preservation of the best interests of society at large.

THE INDIAN JACKAL.

THE Indian jackal in general appearance much resembles the Indian wolf, though in size considerably smaller. I have often mistaken a female wolf, when some distance off, for a jackal, and *vice versa*. The fur, which is seldom smooth or glossy, but more often coarse, ill-conditioned, and mangy, varies much in shade, some specimens having much darker coats than others. The general colour of the upper part of the body is rusty brown, intermixed with hair of a darker tint, and grizzled with gray. Below, the fur is lighter in colour. Extreme length, from point of nose to tip of tail, about three feet. The tail, of a deep brown colour, and darker at the tip, is not nearly so long in proportion to the body as that of the fox, nor is the hair covering it so dense or soft, but shorter and more bristly, and hardly worthy the name of 'a brush.' The animal is gregarious, though seldom more than five or six are seen together. Nocturnal in habits, it sallies forth at sunset in search of food, feeding chiefly on the carcasses of cattle, offal, bones, and, in fact, acts the part of a general scavenger. Occasionally, a jackal will pull down a goat or sheep, and the young of these animals are often carried off in broad daylight. I have known puppies stolen, and

geedhur (as the jackal is called by the natives) often commits fearful havoc among poultry, by forcing an entrance into a hen-roost, even when door and window have been carefully closed and secured. Generally speaking, when successful in getting in, the animal is not content with making a meal off a single turkey, duck, or fowl, but likely enough will slay six or eight before taking his departure. He is also most destructive to game; the young of deer and antelope, hares, peafowl, partridges and quail, one and all fall a prey. Hares are generally surprised in their seats; though I have known a full-grown hare regularly coursed and run down on open ground by a single jackal; this, however, was an exceptional occurrence, and the more general plan adopted by the animal is to stealthily approach and spring upon puss unawares when seated in her form, or while engaged in feeding. Peafowl are often caught in a similar manner, more especially in the neighbourhood of pools of water: these birds almost invariably make use of the same path when passing to and fro from the jungle to water; and jackals, aware of this practice, lie in wait for them towards sunset in the vicinity of drinking-fountains, well knowing that, after a hot day, the peafowl, parched with thirst, will be certain to put in an early appearance.

Though generally nocturnal in habits, at certain times of the year, more especially in the rainy season, it is nothing unusual to come across a jackal in broad daylight. At the hottest period of the year, the animals may not unfrequently be seen lying panting under the shade of a patch of bushes, or behind a tussock of grass. The traveller by rail, if an observer, can hardly omit noticing this circumstance from the carriage-window, as he is whirled along through the dried-up plains of Bengal. In large towns, such as Calcutta or Bombay, these animals are exceedingly numerous, and make most useful scavengers. At night, in the streets of Calcutta, dozens of jackals may be seen skulking about in a single alley, though never collected together in a pack. During the day they retire into the drains and sewers of the city, or seek shelter in small archways under bridges, and there remain hidden till nightfall, when again they issue forth, and spread themselves over the town in every direction.

Jackals generally breed in burrows in the ground, sometimes in drains or in hollows under piles of rocks and boulders; the female usually has four or five cubs at a birth, born blind, but the young things are soon able to move about and follow the dam.

Although the females bring forth their young in such spots as just described, yet the jackal does not, like the fox, habitually live in holes excavated in the ground, but prefers rather a thick patch of sugar-cane or clump of high grass as a place of concealment during the day. It often frequents thick matted reeds and rushes bordering on ponds and swamps, especially during the hot-weather months.

The cry of the jackal is a series of loud and most disagreeable yelps and shrieks, nowhere heard to greater perfection than after nightfall in the streets and lanes of large towns. A pair of the animals can raise such an unearthly outcry, and with such a variation of sounds, that any one unacquainted with the vocal powers of the brutes would be led to imagine that at least a dozen,

instead of only two or three, were assisting in the chorus. A single animal usually commences the concert with a long-drawn doleful wail; this appears to act as the signal and key-note for every loafing *geedhur* within hearing to 'strike up,' and take his part in the melody; and immediately the air resounds with the yells and cries of half-a-score of jackals. The harmony continues, each moment increasing in vehemence, for perhaps a minute or two, and then gradually dies away, much to the relief of the inhabitants of houses anywhere near. Then dead silence reigns for perhaps half an hour or more, till some wretched brute afar off commences again with the prolonged opening howl, the prelude to another odious clamour. To add to this hideous din, dogs of all kinds, especially village pariahs, join in the nocturnal music, so that to any one newly arrived in the country the noise becomes unbearable, and sleep impossible.

Like the wolf, the jackal is a difficult animal to render altogether tame, even when reared and kindly treated from a cub till full grown. It is naturally of a suspicious and distrustful disposition, and seldom, like the dog, displays any genuine affection for or attachment to its master. European soldiers in India frequently have their barracks filled with various pets, such as monkeys, mungoses, badgers, dogs; sometimes, but rarely, wolves and jackals; and I have seen hyenas, besides antelopes, deer, and perhaps a regimental bear, chained up outside. I remember constantly meeting with a private soldier belonging to the 106th, at Jhansi, accompanied by a full-grown and exceptionally tame jackal trotting at his heels; this animal was unusually docile and confiding, permitting any one to pat and caress him, though careful to keep close to his protector on the approach of one of the numerous barrack dogs.

The sense of smell is exceedingly acute in the jackal, enabling the animal to detect its natural food from afar; and it is extraordinary how speedily the carcass of a bullock or carrion of any kind is discovered, and with what rapidity the body disappears. Many a murder never comes to light in Eastern countries from this cause: the perpetrators of the crime have only to place the corpse of their victim in some out-of-the-way though exposed position, and speedily keen-eyed vultures, hungry hyenas and jackals, will assemble, and in the space of a few hours or less remove every proof of the deed, leaving little trace to mark the spot. Like the hyena, the jackal is a regular attendant on, and profits by the leavings of the tiger, panther, and other carnivora, and readily makes a meal off the remains of dead bullocks, deer, &c.

Not only does perfection in the power of smell enable the theftful jackal to discover where the carcass is, but it also assists him in hunting down such victims as wounded antelope and deer. The little tyrant, when going his nightly rounds, aided by the power of his olfactory organs, becomes aware of a not far distant prey; makes diligent search for and speedily discovers the stricken animal, even when herded with its comrades (though, generally speaking, a wounded antelope separates from its companions), and so persistently follows it, that the unfortunate creature, stiff from its wounds, and weakened by loss of blood, soon becomes exhausted, and nearly

always eventually succumbs to the perseverance of its ravenous pursuer. Many years ago, when stationed at Agra, a pair of jackals in broad daylight joined in the chase of a crippled ravine-buck which I had severely wounded with a bullet, and greatly assisted me in retrieving the quarry. It happened thus: the gazelle, an animal remarkable for extraordinary tenacity of life, had dropped apparently dead to my shot, but while reloading, it suddenly regained its legs, and, to my surprise, though evidently mortally wounded, made off at speed. I pursued, and did my utmost to keep the creature in sight, but in vain, for I soon lost sight of it among a maze of ravines bordering the river Jumna close by. Presently, while following the tracks, I was surprised to observe a pair of jackals in front of me with their noses to the ground, evidently hunting, and probably engaged in the same chase as myself; and a few minutes later, on rounding a turn in the nullah (dried water-course), I came right upon the blood-stained pair busy worrying at the buck, which they had already killed and much torn. At first they actually seemed loath to surrender the prize; but a stone sent at them drove them away. Possibly, it was the smell or the sight of blood that had attracted the jackals, and induced them to hunt this particular antelope; instinct telling them that the creature was injured, and that, therefore, they might succeed in running it down. Though, had the gazelle been uninjured, and in full vigour, they never would have attempted pursuing so swift an animal, knowing full well how easily the nimble little creature can, under ordinary circumstances, escape from their clutches, and with hardly an effort leave them far behind.

The natives of India believe in 'a solitary jackal,' which, from its singular harsh cry, they call the *phéall*, and which they declare invariably accompanies, or is accompanied by a tiger or other wild beast; and it has been stated by some writers that this extraordinary call of the *phéall* is never heard but in parts of the country infested by the larger carnivora. This statement, however, is somewhat at variance with my own personal experience, for not once or twice, but repeatedly when quartered at Jhansi, I have heard this peculiar yell or call within the precincts of the cantonment, once in my own garden close to the house; and I need hardly say that no tiger or wild beast of any kind (except now and then a skulking hyena) dared to venture so near to the dwellings of man. On the other hand, I must confess that I never once remember hearing the cry of the *phéall* in Calcutta, or in the vicinity of any other large town where jackals abound; a fact which would seem to favour the 'solitary' theory. There can be no doubt, however, as to the animal which utters this particular call, for I have heard the cry, and immediately afterwards shot the animal, which proved to be a veritable jackal.

Some animals, such as the panther, for instance, during the pairing season, give out a peculiar cry at that particular period; and we know that during the rutting season stags bellow. Possibly this peculiar call of the jackal, which has attracted so much attention, may be attributed to some such signal or call between the sexes. I have noticed that dogs become intensely excited on hearing the cry of the *phéall* (the unearthly yell of the

hyena has a similar effect); and my English setter, who, beyond a low growl, would take little or no notice of a whole pack of shrieking jackals close to the house, would immediately, on the very first cry of the 'solitary' jackal, even when far away, spring to his feet, with the hair on his back bristling erect, and rush out of the house barking furiously.

Jackals often suffer from hydrophobia, and at such times become dangerous, for, instead of avoiding human beings, as is their ordinary wont, they will sometimes viciously attack wayfarers. Many years ago, when a wing of my regiment was stationed at Cachar, one of our sepoy sentries broke his musket while endeavouring to despatch a mad jackal that approached his post during the night; and it is nothing unusual to hear of natives dying a miserable death from the effects of a bite.

That the jackal can at times be bold and mischievous, the following anecdote will illustrate. I kept half-a-dozen milch-goats when quartered at Jhansi, which were allowed to graze unrestrained in the compound, or on the banks of a stream near the back of my residence, where one would have imagined that, during the daytime at anyrate, they could come to no harm. Early one afternoon in the month of August, I was seated in the verandah of my bungalow busily engaged preparing a despatch for the English mail, when my bearer and dhole (washerman) came running up full of excitement, and informed me that only a few minutes previously, an animal, which they believed to be a wolf, had seized one of the goats; and that, when compelled to quit his hold by the approach of human beings, he had taken refuge under a narrow archway beneath a bridge close to the spot, from whence probably he had just before emerged. On further inquiry, it appeared that my washerman, while busily employed at his usual vocation (namely, banging his master's shirts by way of cleansing them, and much to the detriment of the buttons, against a flat stone in the water), presently had his attention arrested by piteous cries of distress from the direction of the herd of goats; and on looking over his shoulder, to his astonishment beheld an animal which he declared to have been a wolf grappling with one of the flock, and dragging it down the bank of the stream. He ran forward, shouting; and the brute, on his near approach, relinquished his prey, and, as already stated, sought shelter under the low archway of a bridge hard by.

On examination, with the exception of a slight tear on the neck, the goat, in spite of the rough treatment she had undergone, appeared to have escaped serious injury. The next thing was to punish so bold a marauder. I loaded a double rifle, and in company with a number of natives, directed the dhole to shew the way. We reached the bridge in a few minutes, and as it was impossible to see down the dark narrow tunnel beneath, half choked up as it was with weeds and sand, I directed one of my followers to procure a long stick with which to stir up our friend, and compel him to shew himself and leave his hiding-place. Presently the man returned with a bamboo, and almost immediately after forcing the pole up the one entrance of the arch, out bolted, not a wolf, but a very large jackal, from the other. A gun loaded with a charge of shot would have been a better weapon than the rifle I held in my hand.

However, after missing him clean with the right barrel, as he scudded off, I made rather a neat shot with the left, and bowled him over. On a closer inspection, the animal proved to be a male jackal of the common type, but of such unwonted size, that on viewing its thick muscular body and long gaunt limbs, I wondered little at the blunder committed by my servant in mistaking it for a wolf; and indeed, the formidable set of teeth which garnished the jaws would have done credit to even that animal.

I may mention in conclusion, that many classes of the natives of India (who are a superstitious race in general) dread hearing the cry of a single jackal when uttered in close proximity to a dwelling, asserting that it denotes 'a death' before long in that particular abode. And in former times, prior to Thuggee being put down by the English government, a fox crossing the path of a gang of Thugs about to start on an expedition, and on the look-out for propitious signs, or the contrary, was regarded as the very worst token of all for success, and a certain warning, should the enterprise be persisted in, of failure and disaster.

FALLEN FORTUNES.

CHAPTER X.—A TRUE WIFE.

WHEN we poor sons of men are miserable, we are prone to think that we have reached a depth of distress beyond that which the experience of others has sounded, and are approaching the very limit—and even exceeding it, since in despair we often seek refuge in the grave—which human nature can bear. The gentleman who has just been black-balled at the long-desired club; the lady to whom the Lord Chamberlain has refused permission to present herself at Her Majesty's Drawing-room; the business man who finds himself unable to meet his engagements on the morrow; the wife who has just discovered the unfaithfulness of her husband: all these, although suffering such different degrees of woe, imagine that not in the condemned cell of Newgate itself is to be found a mortal so utterly forsaken by the gods as they. It is the poor privilege of the wretched to exaggerate their calamities, and perhaps John Dalton indulged himself in this way like the rest. Yet it is difficult to imagine that that autumn morning dawned upon a human creature more wholly miserable than he, as he crept down the thick carpeted stairs and along the painted corridors of Riverside to his own room. Everything about him breathed of wealth and luxury, while every thought within him pictured ruin. Hour after hour, he had sat alone till the cold gray light had broken over the crags of Bleabarrow, but not one ray of comfort had fallen upon him; he had racked his brain for a single gleam of hope wherewith to mitigate the gloom of that confession, which he must now needs make to his unsuspecting wife, and had found none. He had prayed, and his prayer had come back to him, as it seemed, rejected. There are agonies in which the impatient soul demands some visible sign of God's good providence, and being denied it, it dares to question His existence. There was no help for him, he cried in his exceeding bitterness, in God or man. As for himself, he was ready to own that he did not deserve such help; and if he had stood alone in the world, he would have taken his

punishment, doggedly perhaps, but without repining or complaint. He was no coward, though in that dark hour (as generally happens) his very vivacity of spirits, quickened by long years of prosperity and success, shewed its seamy side, and made him proportionably prone to despondency; but his apprehensions for the fate of those he loved, and whom his folly had dragged down to the dust, were overwhelming.

His delicate and devoted wife; Kitty, with her beauty and expectations; Jenny, prostrated by her illness, and for whom until now everything had been done to prevent even the winds of heaven from visiting her too roughly; little Tony, with his education but just begun, and looking forward to being an Eton boy: each of these pictures, to gaze on which had hitherto been the pride of his life, was now become to him terrible to look upon; and yet, alas, they were living realities. The prospect was not to be evaded or shut out; not one of these beloved portraits could he turn with its face to the wall.

As he drew near his dressing-room, his step fell more lightly on the carpet, and he turned the handle of the door very softly, lest his wife, who slept in the next apartment, should be disturbed. His intention was on no account to waken her, but to suffer her to sleep on until near her usual hour for being called, when he must needs tell her his ill news. It would be the last sleep free from care that she would ever have; and as for him, there was small chance of his losing consciousness of his woes even for a moment. To his surprise, however, on entering his dressing-room, the window-curtains of which were of course closed, excluding the dawn, he perceived a strong light under the door that communicated with the next apartment. At the same moment he heard his name called in those dear accents the sound of which had hitherto been ever as music to his ear. Now, they only evoked a shudder. Without trusting himself to answer, for he was sensible that he had lost control over his own tones, he summoned up a smile, and opened the door. To his great distress, he found Mrs Dalton had not retired to her couch, but was sitting in her dressing-gown, awaiting him—as she had doubtless been for the last six hours.

'My dearest love, how can you be so imprudent?' He was careful for her health at all times, and there was an especial reason for her taking care of it for the next few months to come; for the moment, he only thought of that, and not of the sad burden of woe which he had come to share with her.

'I could not sleep, dear,' said she tenderly, 'until I had seen you, and heard from your own lips what it was that has troubled you so.'

Here, as it might seem, was his opportunity of gently breaking to her his terrible news; but no sooner did it present itself than his courage failed him. What hurry was there, after all, to introduce this innocent and unsuspecting creature to irreparable calamity? He had made up his mind, indeed, to do so that very morning, but it now struck him that there was no need for such great haste as that. The blow, indeed, must fall, but it would not do so immediately, and it was his duty to prepare her for it by gradations. Any sudden shock to one in her delicate situation might have a serious effect, and was to be avoided. Though death was sweet to himself, because of the evil that he had wrought

her, he shrank from contemplating it—miserable though her life might be—in connection with her.

'My darling, you alarm me beyond measure: to lose your natural rest, is to do yourself, just now, a serious injury. My news, whatever it be, might surely wait for the morning.'

'I must know what it is, John, I must indeed,' pleaded she; and she rose from her chair, and placing a thin white hand upon each of his shoulders, looked straight into his eyes. 'Do not tell me it was the election only. Have I known and loved you all these years not to know better than that? Thank God, you are well!—in health at least—and the children are well. If I had not had them under my own eye to-night, I should have thought, when I looked upon your face, that there was something amiss with them. What else, John, can have happened to so change you?'

'To change me, Edith? I flattered myself my manner was much the same to-night as usual. But it is quite true that something has happened to trouble me.'

'Then it is a mere money trouble?'

'It is a money trouble, but a very severe one.'

'Thank God, thank God, it is no worse!' said Mrs Dalton fervently. 'That nothing of blame or shame could be laid to your door, I knew; but I was apprehensive—I always have been—that your connection with Mr Holt might lead you into some painful position. Your reference to him in your letter of this morning made me uneasy. None of us like the man: we are only women, moved by instinct, and not by reason; but since such a feeling was common to all three of us—'

'There seemed something in it, eh, my darling?' observed Dalton, finishing the uncompleted sentence. He found his task much easier now than he could have hoped for. What his wife had said was strangely consonant with his own recent thoughts. He knew that Holt was no favourite with her or with the girls, but he had no idea that they entertained any such suspicions of him—unreasonable, as she herself had said, yet suspicions which he shared. In her case, however, he did not wish that they should be corroborated; it was better she should feel he had been ruined by his own folly than another's fraud, even if there had been fraud.

'I know nothing against Holt's honesty, my dear,' continued he gravely. 'But I did not wish you to speak to him about the election, lest you should have heard something from his lips, which should be told only by my own. It was most essential to me, as I thought when I wrote that note, to succeed at Bampton; my credit—by which I mean my commercial importance—would be seriously affected by the result; but now all that has sunk into insignificance, in the presence of an overwhelming calamity.'

'You have lost your fortune, John!' Her tone was grave, but very soft and gentle, and there was a smile of content upon her face, very strange to see at such a time.

'Yes, dear, I have; God help me: every farthing of it.'

'But you have not lost us, John; I am still with you'—her voice trembled a little, but she went bravely on—'and the dear children.'

'Yes, darling; it is on your account and theirs—not on mine, God knows—that this has un-

nerved me; that the burden seems more heavy than I can bear.'

'Then let us help you to carry it; what is heavy for one is light for four. The girls are old enough, and wise enough, to bear their part. What is the loss of money when love is left!'

'Edith, Edith! you know not what you say; you have not pictured to yourself what ruin is. Did you not hear me say that I have lost my all?—and, Heaven forgive me, *your* all also!'

She sank down in the chair, for her limbs had failed her, still retaining his hand within her own. 'I did not understand,' said she in a faint voice; 'God help us!'

'Even she, devoted as she is, cannot image to herself,' thought he, 'my fatal folly, and forgive it; such a baseness as I have committed is inconceivable to her innocent and unselfish nature; I am condemned by the sole judge to whom I could have looked for mercy.' How wrong he was, how little he knew her, notwithstanding that he loved her so! When we stand before the judgment-seat of Heaven itself, we may know—I trust we shall—a diviner pity, but here on earth there is no such unstinting fount of ruth and forgiveness as the heart of woman.

'Pardon me, dear John,' were her first broken words; 'the weakness has passed now; and I feel as befits your wife. Yes; and I would not change my place to-night, this moment,' taking his head within her hands, for he had cast himself upon his knees at her feet, and hidden his face in an agony of remorse and shame, 'with that of any woman in this world, no matter how rich—how prosperous! And I love you, John, better in your poverty and your ruin, than I have ever loved you yet; and I will be true to you, and be your help—as help may be in me—and so will Kate and Jenny.'

Then she broke down. She could have borne all herself, but the thought of her children, and what they would have to bear, was too much for her mother's heart. Husband and wife mingled their tears together—bitter tears of self-condemnation in the one case, and of tenderness and pity in the other. 'Hush!' said she, for the grief of a man who has not shed a tear since childhood is always loud; 'Jenny is a light sleeper,' and she pointed to the door that led into the room of the invalid. 'Now, tell me all about it, John; I can bear to hear it much better than I can bear to wait. I know the worst; how can it hurt me, then, to know the shape in which it has come! Nay, it's idle to talk of rest, of sleep; I pray you, tell me.'

So, sitting hand in hand, John Dalton told her all, omitting only his suspicions concerning Holt.

She listened attentively—asking a question calmly here and there, when she required some matter of business to be explained—to the bitter end.

'Then if the bad news about the mine should not be confirmed,' said she, 'our affairs would not be so desperate?'

'They are already confirmed, Edith: do not, I beseech you, indulge in any hope on that head. The mine was a swindle from the beginning.'

'Yet Mr Holt persuaded you to invest in it?'

'Certainly: he thought it a genuine thing and a very good thing; he purchased largely in it himself; that I know of my own personal knowledge.'

'And yet he sold his shares afterwards?'

'Yes; but at a high premium. If I had followed his advice, I am bound to say I should have made money by it. I had taken—I don't know why, unless it was from what he had originally told me—a fatal fancy to the investment.'

'And to whom did Mr Holt sell his shares?'

'I don't know; it was doubtless done through a broker, and he may not even know himself. Why do you ask that question?'

'From ignorance, my dear. I understand no more of such matters than our little Tony.'

'Poor boy!' sighed Dalton despondently. The mention of his son brought keenly to his mind that sense of ruin which this discussion about the *Lara* had for the moment diverted from it.

'Well, darling, we must look about us,' said Mrs Dalton cheerfully, 'and plan what is to be done. A man of your talents, who has got so many influential friends, need not surely long remain without some lucrative employment.'

John Dalton had had some experience of place-hunting, though not upon his own account, and he knew that in that description of sport the 'blank days' were many, and that those even of the most skilful huntsmen who 'find' at all are few. The humiliation of beggary would be terrible to him, and how often would he have to beg and be refused.

'There are the Skiptons, you know, darling; they have always been such friends of ours, and Sir William, who is in the ministry, would surely exert himself for your sake.'

Her husband shook his head, as though he did not entertain much hope of assistance from that quarter. Sir William, although he was the Attorney-general, was a dull man, and Dalton had more than once expressed his opinion to that effect—of course in the politest possible manner—when they chanced to differ. Their families were very intimate, but the men themselves were as opposite as the poles, and had no very high opinion of one another. Twenty-four hours ago, it would have seemed as impossible to Dalton to have asked a favour of Sir William Skipton, as to pick his pocket; he would not have done it, had he been starving. But the question now was whether he could bring himself to do it, to provide bread for his children.

'Then there is Cousin Tatham, John; I am sure he has always expressed the highest admiration of your talents.'

Poor Dalton winced at this. Lord Tatham, a distant relative of his wife, was a venerable nobleman who enjoyed a certain insignificant appointment about the court; and though, from his appearance of wisdom and gravity, he might have sat upon the woolsack to represent the Lord Chancellor in his absence, he was, in fact, a nonentity; a mere stuffed personage with a bag-wig and sword. He was, it is true, always talking about his patronage, but it was only the appointment of the royal footmen that lay within his gift.

While Mrs Dalton thus imagined to herself that the court and the ministry would both be interested in her husband's favour, he himself was rapidly reviewing in his own mind all the really possible chances that were open to him, and they seemed few indeed. He had friends, it is true, upon whom he could rely for sympathy, and even, perhaps, for material aid—though in a

shape which, even now, he could not conceive himself capable of accepting—but they were men of his own style and character, genial, agreeable fellows, but who had, with few exceptions, never sought to burden themselves with the duties, and therefore the privileges of office. He felt that they could have nothing to give him in the way of employment. He had a slight acquaintance, indeed, with a minister or two beside Sir William, but he had always attached himself to the other faction in politics, and it was unreasonable to expect that his late attempt upon the virtue of the borough of Bampton, though it had failed, would recommend him to their good offices.

Nothing very practical, indeed, came out of the long discussion that took place that weary morning, concerning future ways and means, between husband and wife, yet Dalton found an unexpected solace in it.

He had never before taken Edith into his confidence upon the state of his affairs; and her sagacity and common-sense, wherever her knowledge of the grounds upon which to build was equal to his own, surprised him. We do not give the angels such credit for aptitude for worldly wisdom, as perhaps they deserve. Mrs Dalton's views were doubtless sanguine; she had much more confidence not only in her husband's friends, but in his own abilities, than he had himself; but if sympathy is not help, it is next akin to it, and hope begets hope; and before their talk was over, Dalton was certainly in a less despairing mood than he had been some hours ago.

Though his wife had suggested much, she had stipulated but one thing—namely, that their misfortune should, if possible, be kept from the knowledge of their children until their return to their own home. 'Let them enjoy themselves for the few days that remain of our visit here, John; it will be easier to break this news when we are all together under our own roof; nor do I wish, unless you see any good reason to the contrary, that our host and hostess should learn what has befallen us, while we remain their guests.'

It was out of the true mother's heart, we may be sure, that the first advice was given; but of the source of the second, I am not so certain—perhaps it was a little womanly pride. Her connection with the Campdens had always been on equal terms, and she shrank, though the change must needs come sooner or later, from its being placed on another footing. Or, perhaps, she thought that Julia would not prove the most sympathising of friends at such a crisis.

To both conditions, Dalton would have willingly assented, but he feigned objections in order to gain compliance, by giving way, with a stipulation of his own—namely, that Edith should retire to rest for the little time that now intervened before her usual hour for being called. To this, she was with difficulty persuaded, and presently, worn out by watching, and weariness and woe, she fell asleep.

As the daylight struggled in, and lit up her delicate white face, as it lay beside his own, a new fear crept into his aching heart, and mingled with its other tenants. Suppose that his faithful and beloved companion should perish in her coming trial, and leave him *alone* in the dark days to come! The thought was agonising, but only in consonance with those which already beset him. That worst, at which, when we have arrived,

it is said that 'things must mend,' he felt was limitless in evil. There are times when poor humanity rejects the smooth prophecy, 'Heaven will never desert me so utterly as to suffer this to happen or that;' but, with sickening fear, expects the utmost cruelty of Fate.

EAST END AND WEST END.

AMONG the 'working clergy' of London, there are few who are better known than the Rev. Harry Jones, late rector of St Luke's, St James', and at present incumbent of St George's in the East. He has known very literally 'St Giles' and St James', and is well qualified to speak of both; and his transition from West to East of the great metropolis has given him the opportunity of drawing a most interesting comparison between them.* When he came to dwell in East London, he found many curious contrasts with the district which he had left. He was now among ships, just arrived from long voyages, with numerous foreigners speaking a strange language. This contrast of faces and apparel, 'this mixture of land and water, of homely trucks and foreign traders, of horse-vans and steam-vessels; the tier of huge ocean-going ships, brought so close to the shore that you can touch their long black sides with your stick or umbrella,' as you walk by them, produces a sense of proximity to the ends of the earth, and adds to the above-mentioned sense of space. Our author is convinced that this affects the thinking powers of the inhabitants, and renders them more catholic, and less prejudiced. And yet the poor folk in the East are very hardly worked, so that they have less time for thought than most of us. With the exception of the coarse enjoyments of the sailors, there are few pleasures to be found there, and none of an ambitious sort. No one dreams of a carriage-airing, nor indeed of a carriage. 'Here have I never seen a coachman in a wig, or a footman in powder. I have never met a lady on horseback or a "Victoria;" and though we go so much about on foot, such a luxury as a crossing-sweeper is unknown.' There is no 'London season' in the East, but only summer and winter. Town is never full or empty, but always the same. What is very curious is, that the exception to this uniformity is on the annual race-day between Oxford and Cambridge, 'when the loneliest and dullest street breaks out in blue ribbons, and the van-horses toiling up Old Gravel Lane from the Docks wear their colour.' We fancy this does not arise so much from sympathy with our University institutions on the part of the East-enders, as from their association with the River, by which many of them, in two senses, live. The Thames—no 'silent highway' in this locality—brings with it their occupation. Their livelihood, in very many cases, although they live on shore, depends upon the winds and tides. When the wind brings the ships, every one has his hands

full of work; but when it blows against them, the dock-labourers stand idle at the gates. The wealth that lies in the huge, ugly storehouses in this region, or hidden among 'the square plantations of bare masts,' is inconceivable, while the wares themselves are of the most poetic and sumptuous kind. Without, is Wapping; within, is the Arabian Nights. 'Here are stores of ebony and ivory. Here are the choicest cigars, the richest drugs, the brightest dyes, the sweetest perfumes, and the finest wines. . . . Pines from the West Indies, oranges from Seville, teas from China, masses of ice from Norway, marbles from Carrara, and spices from Ceylon.' All the products of the world are to be found within a few square feet of one another. Walk round the little dock of St Catharine, and here you shall see ten thousand bags of coffee, and here seven hundred and fifty thousand pounds worth of indigo, and here thousands of fagots of cinnamon scenting the air. Sometimes you may come upon things that do not exactly scent the air, such as half-a-dozen wagon-loads of asafetida, which, it seems, is used as a condiment in Persia, and thought capital with beefsteaks. At other times, you may stumble upon a quantity of 'old-fashioned trunks, with the hair outside,' which are cow-skin packages full of quinine bark, sewn up with thongs. Then there are the wine-vaults at the Docks, where most of us have gone when we were middle-aged and foolish, with a 'tasting order,' and repented of it. For one thing, there are no less than 'six acres of port, sherry, and madeira, and, under one roof, sixty thousand huge casks of brandy, worth, on the average, seventy pounds apiece.' In the Docks is maintained a standing army of three hundred cats to kill the rats which swarm there, besides many human auxiliaries who get their living by clearing the freshly unladen ships of these vermin. The charge for 'ratting a ship' is a pound; but the rats are caught alive and sold for twopence apiece to 'sporting gents;' so that the calling is remunerative.

In the longest vault of the London Docks, the iron rails on which the casks are rolled reach altogether twenty-two miles! The alleys, however, are narrow. All along the track, the ceiling is black with fungus. But there are worse things than that to look at and think about. 'The sugar, molasses, and treacle-stores in the Docks are anything but appetising. One day,' says our author, 'I was walking along the huge sheds on the ground floor, where all this sweet stuff is lodged, and saw a parcel of men scraping the floor with hoes, much in the same way as the scavengers do the streets. And the mud they scraped up was very black. On my asking what they did with it, one of the superintendents told me it was going to be made into lollipops.' It is fortunate that *East and West London* is not a book likely to be very popular in juvenile circles, else this disclosure would be alarming indeed.

The East of London, while in the very van of the time in many respects, retains some of our oldest institutions. The curfew, for example, is still tolled at St George's, and in fulfilment of its original design. When the clock strikes eight, the bell 'goes' for a quarter of an hour, and gives the signal for turning off the gas in various workshops. At a quarter before six in the morning, too, it begins a designedly irregular clang—very

* *East and West London.* By the Rev. Harry Jones. Smith and Elder.

pleasant for the poor rector who lives under the shadow of the belfry—to awaken the East-end workers. 'The tower is so close that I can hear the rattle of the rope and the groan of the wheel before each metallic "boom." And when the last stroke of six has been struck in a storm of accompanying clangour from the heavy alarm-bell, the air long remains filled with an angry hum, as though the emperor of all the hornets was flying about the room.' Such is one of the pleasures of shepherding a 'working population.' But Mr Harry Jones does not mind work, or any of its associations. Indeed, he likes it so much, that he is easily angered against the drones. He informs us rather grimly that fifteen of the City churches—which an inquisitive but accurate friend of his attended for the purpose of taking a census of their congregations—have for the sum-total of their attendants (barring the charity-schools) two hundred and ninety-one individuals, or less than twenty apiece. 'Their priests frequently live away, perhaps in the pleasant places of the country, and on Sunday come up to their cures with two sermons in a little black bag.' Some of the livings are of considerable value, but the main sum is out of sight, consisting, as it usually does, of the proceeds of their 'parsonage,' let at a very high rent for business purposes. 'It has been estimated that the parochial charities of the City could, without serious inconvenience to any one, produce two million pounds—enough, according to an estimate of Sir Sidney Waterlow, to provide sufficient sites for as many improved dwellings for working-people as are needed in the metropolis.'

Of the newspaper literature of the inhabitants of the East, our author gives a very humorous account. No print over a penny in price is in circulation there. 'We file the *Times* in the vestry, but it is too dear for local use. I take it in, but, unless I ordered it, I could not get a copy at any of our local newspaper shops. I fancied, however, that I had found a neighbour with a special literary or political interest in the leading journal. My copy of the *Times* goes on the second day to a worthy butcher hard by, to whom it thus comes cheap. On one or two occasions, however, when I wanted to refer to something in the copy of the previous day, and sent to beg the loan of it, I found that it had been torn up. The truth gradually revealed itself to me, that my practical neighbour preferred the *Times* because of the toughness of its paper. He desires to have the news, but is content to get it rather late if printed on material tenacious enough to hold small parcels of meat without bursting.' The East, indeed, is not very 'cultivated' as respects literature, or very 'aesthetic' as respects religion, but, as a rule, it is neither graceless nor godless; 'a district is not necessarily degraded because it has no opera-house, polo club, or footman in powder,' and, it may be added, only one *Times* newspaper. 'It is distinguished,' boasts its chief pastor, 'by a steady and laborious discharge of duty, which before God is of great price.' We are afraid that, in our author's eyes, 'the Eastern Position,' about which such a fuss is being made by people who don't know what real parochial work—not to say real religion—means, is of small importance compared with such an Eastern fact as this. Moreover, despite the poverty of his new parishioners in St George's in the East, they beg much less than do

the poor in St George's Hanover Square. Their manners on the whole are good; there is not much courtesying or touching of hats, but a certain frankness and pleasantness of address, which a right-thinking man calls wholesome. There are not many actual 'roughs' in the district, though many of the population are 'conspicuously the reverse of smooth;' and our author is a judge of roughs. He has been in some queer places in his time, and seen queer people, for he is the sort of priest that shrinks from going nowhere if upon his Master's errand, and as such he has come to the conclusion that even in the 'ugliest corners' people are inclined to be civil to you if you are civil to them.

There are a good many things, indeed, in this book, both about 'East' and 'West,' that are calculated to astonish even moderately strong minds. Herein may be read in brief the whole history of the working-man, including his club, which some good folks thought could be carried on by the subscriptions of the aristocracy. The one which Mr Harry Jones started was self-supporting from the first, bought its own liquors, its own billiard-table (it has now two), and had its own servants. 'It was for some time found cheaper to send to an eating-house than keep a cook; but now the cooking is done as at the Athenaeum or Reform Clubs, though we have not had a Francatelli or a Soyer. . . . Once or twice I was asked to dinner there, and had a very good meal and a kindly welcome.' This is a writer who knows the working-man well; and one of the causes to which he attributes the growing vice of drunkenness is very curious, and we have no doubt worth notice. It is the monotony of trade, the universal division of labour. Work is now so subdivided that a man gets tied down to the ceaseless repetition of a particular process. A bootmaker does not make boots, he only fastens the 'upper' to the 'sole;' a 'closer' does the stitching. This is the same with all trades. Human nature abhors the tedium of it, and 'breaks out.' Then there is want of air, want of amusement, and above all things, the degrading influence of a crowded lodging. It is hopeless to expect the light of education, morality, religion, or whatever else is best, to keep alive in that tainted air. The wholesome dwelling-house is his great remedy for much that is amiss; and when one reads what he has to plead in behalf of it, how idle are all the questions that convulse the so-called 'religious world' beside this simple need, which can mainly be met by the pocket. However, these matters are only touched upon in the book before us, though, as it seems to us, with a master-hand.

We should like to be with the rector when he presides over the annual drawing of the lots of the six marriageable maidens from 'Raine's Charity,' the lucky one of whom gets a hundred pounds as a dowry. Mr Raine left his money away from his nephews, well convinced, as he sets forth in his will, that if they had seen, as he had, the innocent maid who got the prize burst out into tears of joy, they would have been quite content with that disposition of his property! But 'how about the five poor innocent maids,' inquires our author, 'who don't get it?' and who have all provided themselves with suitors, some of whom may cry 'off' when they have drawn

blanks. Sentiment, to suit Mr Jones' taste, must be of a nature to stand 'frying,' and we wish there were more folks of his opinion.

Space forbids us to speak further of this excellent book, save to quote one singular fact. If Mr Harry Jones is not a lion, he is very near one. 'I suppose that there is no other place in the world where a domesticated parson could ring his bell and send his servant round the corner to buy a lion. I could indulge this whim at five minutes' notice.' The fact is, he is neighbour to Mr Jamrach, the great wild-beast collector. At present, in the East of London the market is high for tigers, which cannot be bought under two hundred pounds; whereas a lion fetches but seventy pounds, and a lioness even less. You may buy orang-outangs for twenty pounds apiece; and even these are not the most remarkable inhabitants of East London.

A RAILWAY RUN.

One day in August of last year I travelled from Paddington to Exeter by the eleven forty-five train on the Great Western Railway. By the courtesy of the management, I was permitted to travel in any portion of the train at pleasure, and to ask any questions respecting the working of the line, the signals, &c., of any of the officials. The eleven forty-five A.M. express is the fastest train in the world; and when I saw the huge and powerful engine on which my journey had to be performed, a slight feeling of nervousness came over me, because I then realised that, like it or not, having once started, there was no help for it but to remain where I was for seventy-seven miles. One glance, however, at the face of the polite engine-driver, Mr Price, was quite sufficient to reassure me, for there I saw clearly written, not only courage, but skill. The guard's whistle sounds, and I take my place on the foot-plate of the engine. We go slowly until we clear the outskirts of the station, and notwithstanding the great weight of the engine (38 tons), we have a few bumps over the points; when, however, we are clear of these little obstructions, it becomes quite evident that our iron monster means business. With a jaunty shake of his funnel, as much as to say, 'Look out, I'm coming!' he increases his speed; the telegraph posts begin to fly past; the whirl, tear, and crash of the engine get louder, so that with difficulty I can hear myself speak, and the speed becomes so great that I am fain to hold on, for very fear that I shall be shot off like a stone from a catapult. Onward still faster, for we are in the open country, with miles of straight road before us; and now, were it not that we have profound confidence in the skill of those who laid down the rails, we should feel convinced that the said rails must be torn up—that nothing can keep them secure against the great speed and power of the monster engine. All this time the engineer, with placid face, keeps a sharp look-out with his hand on the controlling lever, ready at any moment for action, should any obstacle occur; whilst the cheery-faced stoker (a veritable Mr Toodles in

appearance) every few minutes heaps great shovelfuls of coal into the jaws of the furnace. Just as we are going at a high speed, something appears to require adjustment near the funnel of the engine. With as much coolness as you or I would cross Hungerford Bridge, our engineer walks over the side of the monster, and gives two or three turns to a screw—just as we are approaching a sharp curve on an embankment twenty feet high. I look upon his destruction as inevitable; hold on doubly tightly myself, under the certain impression that he, and most likely all of us, will be shot over. But no; he quickly returns, as if the speed were of no importance to him, and as if all such things were mere matters of course.

Presently, when we have accomplished about half our distance, the speed seems to flag a little, whereupon our engineer turns a couple of small screws at his feet: the effect is immediate and startling: fast as we were going before, the speed now is something terrific, and it requires an occasional glance at Mr Price's placid face to reassure me that all is right.

People riding in railway trains, and seated comfortably in their carriages, have but a faint notion of the great speed at which they actually go when travelling by express. You must be on the engine, with nothing before you but a couple of small and apparently fragile iron rails, which it seems must be torn up, before you can have the least idea of what railway travelling actually is. On the broad gauge, owing to the great size and weight of the engine, there is comparatively little jolting and vibration; for when going at the greatest speed, I am able to pour out a glass of wine without spilling a drop. At length, we slacken speed, and Swindon Station comes in view, which we reach, having performed the run of 77½ miles from Paddington, without stopping, in a little more than an hour and a quarter. Here, I take leave of my engine friends, having ascertained that the engine is called the 'Estafette'; that it was born in September 1850, and renewed June 1870; that it is one of the, if not the best and most powerful on the line; that it weighs 38 tons 8 cwt.; and that during its lifetime it has travelled 666,695 miles—or considerably more than half a million!

Pursuing my plan, I next enter the quarters of Mr Jones, the guard, who tells me he has conducted the express for twenty years; and 'I've never, sir,' says he, 'had any accident, not even to take the skin off my finger!' I learn some useful facts from Mr Jones, and get some interesting anecdotes. He too seems to have eyes in every side of his head, so constantly is he on the look-out. 'Don't you think, guard,' say I, 'that the trains ought to keep better time? They are frequently very much behind.' 'Well, sir,' he replies, 'it's pretty nearly entirely the fault of the public. Passengers are greatly offended if we don't wait for them when we see them running to catch the train. It only keeps you a minute, they say; but just consider, sir—now, there's a parliamentary train to-night leaving Cornwall which will have to stop at eighty stations; and suppose we are only a minute, or even half a minute, behind at each station—see how that tells up—and, of course, you know that we must wait the advertised time before we start.

Depend upon it, it's the people's own fault; because passengers won't keep their time.' Knowing how often I have only allowed a minute to catch a train, I feel that what Mr Jones says is true, and am rebuked accordingly.

'Another cause of want of punctuality,' says the guard, 'is the fluctuating nature of the passenger traffic. The very train in which we are travelling affords a remarkable instance of this. For some weeks the passengers leaving Paddington have been counted, and the fluctuation is really remarkable. On the first week of counting—on Monday, 90 passengers travelled; Tuesday, 116; Wednesday, 91; Thursday, 131; Friday, 56; Saturday, 172. And the variations are not affected, as you might suppose, by the days of the week. Without a sufficient knowledge of the subject, one would naturally say: "Oh, everybody knows that more people travel on a Saturday, and the railways ought to make preparation accordingly." But mark the actual truth. One week, 172 passengers travel on a Saturday; the next, 188; and the third, only 125; whilst on one Friday, 56; on the next, 200; and on the third, only 60. And when we consider that not five minutes before the starting of the train do the railway officials know how many passengers they have to provide carriages for, we must admit that it is wonderful that trains start with even an approach to punctuality—as increased numbers mean not only a crush at the booking-place, and additional carriages to the train, but also an increase in the luggage to be labelled, and a heavy tax upon the energies of all the employés.'

I learn a good deal more from my friend the guard; and amongst other matters, he tells me that passengers are in error when they imagine that the latter part of the train is the best to travel in. 'People make a mistake, sir,' he says, 'when they try to get as far from the engine as they can—the first three or four carriages are the safest.'

I obtained much valuable experience from my trip; and after a most exciting but pleasant run of four hours and a quarter, reached Exeter, where I horrified an hotel waiter by presenting myself with a face like a coal-heaver's.

I should like to conclude with a few remarks of a practical nature. Railway managers often get more blame than they are entitled to, and are made responsible for accidents over which they really have not the slightest control. Captain Tyler, whose experience is very great, remarks, 'that whatever the amount of care taken, the item of human fallibility will always remain, and will always be the cause of a certain number of accidents.' Yet, taking into consideration the enormous number of travellers who go by rail, one must admit that accidents are comparatively few.

It will be interesting to glance at the amount of traffic on one or two of the lines.

The average number of trains running on each week-day over the Metropolitan extension of the Chatham and Dover line (twelve miles) is 546; and the number of passengers conveyed over those twelve miles during six months is over seven millions. The Metropolitan Railway conveyed on Whit-Monday last over 244,000 persons. During the Whitsun week, over 1,088,000 passengers travelled on that underground line. One-sixteenth of the entire population of London made use of

this railway in one day, without an accident. In the busiest time of an ordinary day—that is to say, between nine and ten in the morning—a train passes over the line every forty-three seconds, or seven trains in five minutes. In the course of the day, 768 trains have to run backwards and forwards. Safety is secured by insuring not an interval of time but of space between the several trains, which is arranged by the operation of what is known as the Spagnioletti system of signals. During twelve years, 294,258,535 persons have travelled by 'underground.'

During a single twelvemonth, the Great Western Railway ran 255,986 trains; some of them contained seven hundred passengers; and it is not an uncommon thing for an excursion-train in three parts—each part containing six or seven hundred passengers—to arrive within a short time of each other at the terminus. Every train has its record—the time it starts, the time it arrives and departs from each station on its way, the time it passes every signal-post. Thus, the manager, if you ask him, will turn to a book, and tell you that of the 255,986 trains just alluded to, 138,646 arrived at their destination punctually to the minute; 48,785 not more than five minutes late; and so on. There is no room in the present paper to allude to signalling, a system daily improving in its working, and gradually becoming more and more perfect.

MOONSET.

I LOVE the sunset's glowing ray,
The 'sober evening's twilight gray.'
But yet more beautiful to me
The calm moon setting in the sea.
Unlike the sun, who fills alone
His grand but solitary throne,
The tranquil empress of the deep,
While Nature sleeps a dreamless sleep,
Not unattended seeks her rest
Upon old Ocean's heaving breast.
Her starry courtiers placed on high,
A shining cortege, through the sky,
In stately, slow procession glide,
Reflected by the dimpling tide.
While, as she glides her downward way,
Silence assumes a stiller sway,
And broods like the Eternal Love
O'er all below, around, above.

Soon crossing the horizon's verge,
Her disk, half-hidden by the surge,
Reflects a still decreasing light,
Then dips, and disappears from sight.
The stars, whose paling rays are seen
Nearest in order to their queen,
Ere in her wake they plunge below,
Pause, as if half-afraid to go,
Suspended in a transient rest
Upon the billows' snowy crest;
Until the perfumed breeze of night
Breaks the reflection of their light,
When lo! they vanish, one by one,
Like torches when a feast is done.

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